

## C L A I M S

1. A display device comprising:  
a display substrate and a rear substrate  
5 disposed with a space;  
a transparent liquid disposed in the space  
between these substrates;  
a partition wall formed from a material capable  
of transmitting light and disposed in the space  
10 between the substrates;  
a light shielding layer disposed between the  
partition wall and the rear substrate; and  
a light scattering layer disposed on the rear  
substrate capable of reflecting an incident light  
15 from outside the display substrate,  
characterized in that a refractive index of the  
partition wall is no less than that of the  
transparent liquid, and an incident light ray on the  
display substrate at a predetermined incident angle  
20 or more that enters inside the partition wall is not  
totally reflected but refracted into the transparent  
liquid at a side face of the partition wall.

2. The display device according to claim 1,  
25 wherein the refractive index of said partition wall  
 $n(K)$  and the refractive index of said transparent  
liquid  $n(L)$  satisfy the following condition:

$$90^\circ - \text{Arc sin } [1/2n(K)] < \text{Arc sin } [n(L)/n(K)].$$

3. The display device according to claim 1,  
 wherein the height of said partition wall H, the  
 5 width W, and the refractive index  $n(K)$ , and the  
 refractive index of said transparent liquid  $n(L)$   
 satisfy the following condition:

$$90^\circ - \text{Arc sin } [n(K)\sin \alpha] < \text{Arc sin } [n(L)/n(K)]$$

where  $\alpha$  is an angle determined by  $\tan \alpha = \frac{W}{H}$ .

10 4. The display device according to claim 1,  
 wherein the partition wall is formed with a  
 photosensitive resin selected from the group  
 consisting of epoxy, polyimide and acryl.

15 5. The display device according to claim 1,  
 wherein said transparent liquid includes a plurality  
 of charged particles.

20 6. The display device according to claim 1,  
 wherein said transparent liquid is a liquid crystal.